AMENDMENT TO THE CLAIMS

1.(currently amended) An inrush current controller for a device, comprising:

a connector for ~~hot plugging~~ plugging the device into a source of energization;

an impedance having a current input that couples to a first contact of the connector, an impedance control input, and a current output coupling to the device; and

an impedance control circuit having a logic input coupling to a second contact of the connector, and having an impedance control output connected to the impedance control input, the impedance control output forcing the impedance OFF during a first time interval controlled by a first timer ~~after hot plugging~~, and the logic input enabling a limited inrush at the current input during a second time interval controlled by a second timer ~~after the first time interval~~.

2.(original) The inrush current controller of Claim 1 wherein the device comprises a data storage device and the source of energization comprises a host computer system.

3.(original) The inrush current controller of Claim 1 wherein the impedance is continuously variable as a function of the control input.

4.(currently amended) The inrush current controller of Claim 1 wherein ~~the impedance control circuit comprises~~:

~~a timer coupling~~ the first timer couples to the current input and the impedance control output, and ~~providing~~ provides a first timer output that forces the impedance OFF during the first time interval; and

an inrush current limit circuit coupled to the logic input and the impedance control output, and providing an inrush current limit output controlled by the second timer ~~enabling the limited inrush~~.

5.(currently amended) The inrush current controller of Claim 4 wherein the first timer output overrides the inrush current limit output to the impedance control output.

6.(currently amended) The inrush current controller of Claim 5 wherein the first timer output is an open circuit after the first time interval.

7.(original)The inrush current controller of Claim 4 wherein the inrush current limit output gradually changes the impedance control output during a turn-on interval so that a device voltage has a slew rate that does not exceed than 12 volts per 100 milliseconds.

8.(original) The inrush current controller of Claim 7 wherein the device has an impedance that is partially inductive.

9.(currently amended) The inrush current controller of Claim 4 wherein the first timer resets automatically when the connector is disconnected from the source of energization.

10.(original) The inrush current controller of Claim 4 wherein the timer is triggerable by voltage transients at the current input.

11.(original) The inrush current controller of Claim 1 wherein the logic input triggers the limited inrush when the logic input is open circuit, and when the logic input is at a high level.

12.(original) The inrush current controller of Claim 1 wherein the impedance comprises a transistor.

13.(currently amended) An inrush current controller for a device, comprising:
> a connector for hot plugging plugging the device into a source of energization, and an
>> impedance having a current input that couples to a first contact of the connector,
>> an impedance control input, and a current output coupling to the device; and

<u>an</u> impedance control circuit ~~means for forcing~~ <u>that forces</u> the impedance OFF during a first time interval <u>controlled by a first timer</u> ~~after hot plugging~~, and ~~for enabling~~ <u>that enables</u> a limited inrush at the current input <u>during a second time interval that is controlled by a second timer</u> ~~after the first time interval~~.

14.(currently amended) The inrush current controller of Claim 13 wherein the impedance control circuit ~~means~~ further comprises <u>a</u> logic input ~~means for receiving~~ <u>that receives</u> a logic input.

15.(currently amended) The inrush current controller of Claim 13 wherein the impedance control circuit ~~means~~ further comprises <u>an</u> impedance control output ~~means~~ coupling to the impedance control input for controlling the impedance.

16.(original) The inrush current controller of Claim 13 wherein the device comprises a data storage device and the source of energization comprises a host computer system.

17.(currently amended) The inrush current controller of Claim 13 wherein the impedance control circuit ~~means~~ further comprises:

   ~~timer means coupling~~ <u>a first timer that couples</u> to the current input for providing a timer output that forces the impedance OFF during the first time interval; and

   ~~inrush current limit means for providing~~ <u>an inrush current limiter that provides</u> an inrush current limit output enabling the limited inrush.

18.(currently amended) The inrush current controller of Claim 17 wherein the <u>first</u> timer means is triggerable by voltage transients at the current input.

19.(currently amended) A method of energizing a ~~hot pluggable~~ device, comprising:

   providing a connector for ~~hot plugging~~ <u>plugging</u> the device into a source of energization;

   placing an impedance between a current input that couples to a first contact of the connector and a current output that couples to the ~~hot pluggable~~ device;

providing an impedance control output connected to an impedance control input, the impedance control output forcing the impedance OFF during a first time interval controlled by a first timer ~~after hot plugging~~; and

providing an impedance control circuit with a logic input coupling to a second contact of the connector, the logic input enabling a limited inrush at the current input during a second time interval controlled by a second timer ~~after the first time interval~~.

20.(original) The method of Claim 19 further comprising: controlling a continuously variable impedance between the current input and the current output.

21.(currently amended) The method of Claim 19 further comprising:

coupling ~~a~~ the first timer to the current input and the impedance control output;

providing a first timer output that forces the impedance OFF during the first time interval;

coupling an inrush current limit circuit to the logic input and the impedance control output, and

providing an inrush current limit output enabling the limited inrush.

22.(currently amended) The method of Claim 21 further comprising: overriding the inrush current limit output with the first timer output.

23.(original) The method of Claim 21 further comprising: gradually changing the inrush current limit output during a turn-on interval so that a device voltage has a slew rate that does not exceed a preselected limit.

24.(currently amended) The method of Claim 21 further comprising: automatically resetting the first timer when the connector is disconnected from the source of energization.

25.(currently amended) The method of Claim 21 wherein the first timer is triggerable by voltage transients at the current input.